

PUBLICATIONS

Thesis

Ph.D. 1988

Gyekenyesi, J. Z., "High Temperature Mechanical Characterization of Ceramic Matrix Composites," Ph.D. Thesis, Cleveland State University, 1998.

Journal

2000

1. Morscher, G. N.; Gyekenyesi, J. Z.; and Bhatt, R. T.: "Damage Accumulation in Woven SiC/SiC Composites." Environmental, Mechanical, and Thermal Properties and Performance of Continuous Fiber Ceramic Composite (CFCC) Materials and Components, ASTM STP 1392, M. G. Jenkins, Ed., American Society for Testing and Materials, West Conshohocken, Penn., 2000, pp. 306-319.
2. Bhatt, R. T.; Gyekenyesi, J. Z.; and Hurst, J. B.: "Silicon Effects on Properties of Melt Infiltrated SiC/SiC Composites." Ceramic Eng. Sci. Proc. 21 (3), p. 331 (2000).

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3. Gyekenyesi, J. Z. and Bartolotta, P. A., "An Evaluation of Strain Measuring Devices for Ceramic Composites," Journal of Testing and Evaluation, Jul., 1992.

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1. Yun, H.; Gyekenyesi, J. Z.; and DiCarlo, J. A.: "Effects of Fiber Architecture on Tensile Stress-Strain Behavior of SiC/SiC Composites." Presented at The 26th Annual International Conference on Advanced Ceramics & Composites, Cocoa Beach, FL, Jan. 13-18, 2002.

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2. Morscher, G. N.; Gyekenyesi, J. Z.; and Gyekenyesi, A. L.: "Mechanical Behavior of Notched SiC/SiC Composites." Presented at the International Gas Turbine & Aeroengine Congress & Exhibition, New Orleans, LA, Jun. 4-7, 2001.

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3. Gyekenyesi, J. Z. and Bansal, N. P., "High Temperature Mechanical Properties of Hi-Nicalon Fiber-Reinforced Celsian Composites," Advances in Ceramic Matrix Composites V, ed. Bansal, N. P., Singh, J. P., Ustundag, E., American Ceramic Society, Ceramic Transactions, V103, pp. 291-306, 2000. Presented at the American Ceramic Society 101st Annual Meeting and Exposition, Apr. 25-28, 1999.

4. Gyekenyesi, J. Z. and Jaskowiak, M. H., "High Temperature Mechanical Characterization and Analysis of Al₂O₃/Al₂O₃ Composites," NASA Conference Publication 1999-208915, May, 1999.

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5. Morscher, G. N. and Gyekenyesi, J. Z., "Room Temperature Tensile Behavior and Damage Accumulation of Hi-Nicalon Reinforced SiC Matrix Composites," Ceramic Engineering and Science Proceedings, Vol. 19, No. 3, 1998.

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6. Jaskowiak, M. H., Eldridge, J. I., Setlock, J. A., and Gyekenyesi, J. Z., "Mechanical Behavior of Sapphire Reinforced Alumina Matrix Composites at Elevated Temperatures," The 21st Annual Conference on Ceramic, Metal, and Carbon Composites, Materials, and Structures, Parts 1 and 2, ed. Opeka, M. M., Jan. 26-31, 1997, pp. 123-136.

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7. Gyekenyesi, J. Z., "High Temperature Mechanical Properties of Enhanced SiC/SiC Composites," Proceedings of the Annual HiTemp Review, Oct., 1995, NASA Conference Publication 10178.

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8. Gyekenyesi, J. Z. and Hemann, J. H., "High Temperature Tensile Properties of SiC/RBSN Composites," Presented at the 17th Annual Conference on Composites, Materials, and Structures (Restricted Sessions), Cocoa Beach, FL, Jan. 10-15, 1993.

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9. Chulya, A. and Gyekenyesi, J. Z., "High Temperature Failure Behavior and Damage Modeling of 3D Woven SiC/SiC Overcoated Composites," HITEMP Review 1992, Advanced High Temperature Engine Materials Technology Program, NASA Conference Proceedings 10104.
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11. Chulya, A., Gyekenyesi, J. Z., and Gyekenyesi, J. P., "Failure Mechanisms of 3-D Woven SiC/SiC Composites Under Tensile and Flexural Loading at Room and Elevated Temperatures," Ceramic Engineering and Science Proceedings, Vol. 13, Nos. 7-8, 1992, pp. 420-432.
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13. Chulya, A., Gyekenyesi, J. Z., and Gyekenyesi, J. P., "Damage Mechanisms in Three Dimensional Woven Reinforced Ceramic Matrix Composites Under Tensile and Flexural Loading at Room and Elevated Temperatures," AIAA/ASME/ASCE/AHS/ASC

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17. Gyekenyesi, J. Z. and Bartolotta, P. A., "An Evaluation of Strain Measuring Devices for Ceramic Composites," HITEMP Review 1991, Advanced High Temperature Engine Materials Technology Program, NASA Conference Proceedings 10082.
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2. Bhatt, R. T.; Gyekenyesi, J. Z.; and Hurst, J. B.: "Silicon Effects on Properties of Melt Infiltrated SiC/SiC Composites." NASA Technical Memorandum 2000-210034, 2000.
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8. Eckel, A. J., Generazio, E. R., Herbell, T. P., Gyekenyesi, J. Z., "Thermal Shock of Fiber Reinforced Ceramic Matrix Composites," NASA Technical Memorandum 10377.

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NASA Tech Brief

1. Gyekenyesi, J. Z., "Fixture Hold Nuts During Tightening of Bolts," NASA Tech Briefs, Nov., 1993.
2. Gyekenyesi, J. Z. and Papadopoulos, D. S., "Graphite/Polyimide Tabs for High Temperature Tensile Tests," NASA Tech Briefs, May, 1993. Submitted for patent application.

Membership in Professional Societies

- 1) American Society for Testing and Materials. C-28 Committee on Advanced Ceramics.
- 2) Society of Automotive Engineers.
- 3) American Ceramic Society

NASA Lewis Research Center Ideas at Work Program

Setlock, J. A., Poole, J., and Gyekenyesi, J. Z., "Fixture for Machining Angled Surface," Sep., 1994.

Gyekenyesi, J. Z. and Hanes, E. R., "Pressure Regulated Pneumatic Grips," Jan., 1992.

Gyekenyesi, J. Z. and Moore, W. A., "Crosshead Fixture," Feb., 1991.

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